



**COLORADO**

**Hazardous Materials  
& Waste Management Division**

Department of Public Health & Environment

## What are the risks associated with fire at Rocky Flats?

Wildfires occur periodically at Rocky Flats, caused by lightning, downed power lines and discarded cigarettes. To evaluate the health effects of future fires, the mass loading (air-borne concentration) calculation for action levels used at the site and the human health risk assessments accounted for the effects of fire. Two mass loading distributions were developed – one for inhalation and one for deposition on plants.

Following the wildfire that occurred in July 2000, the erodability of the burned area was tested with a wind tunnel, a device that generates high-velocity winds and collects the entrained dust.

The report for that study stated that the protection provided by the vegetation and thatch was initially reduced by up to ninefold after the fire. The vegetation in that area improved quickly, however, and within a few weeks the vegetative cover had substantially recovered.

During a prescribed burn in April 2000, air samplers operated by the Department of Energy and others operated by EPA were positioned where they were essentially fully immersed in the smoke downwind of the test burn area for the duration of the burn. The results of both the Department of Energy's analyses and the independent analyses performed by the EPA show that the amounts of plutonium, americium and uranium were below the minimum detectable activity levels.